



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 10  
1200 Sixth Avenue  
Seattle, WA 98101

May 14, 2007

Reply to  
Attn. of: ETPA-088

Ref: 07-013-NOA

Mr. P. Michael Payne, Ph.D., Chief of Permits  
Conservation and Education Division  
Office of Protected Resources  
National Marine Fisheries Service  
1315 East-West Highway  
Silver Spring, MD 20910-3225

Re: Draft Programmatic Environmental Impact Statement for Seismic Surveys in the  
Beaufort and Chukchi Seas, Alaska

Dear Mr. Payne,

The U.S. Environmental Protection Agency (EPA) has reviewed the **draft Programmatic Environmental Impact Statement (PEIS) for the Seismic Surveys in the Beaufort and Chukchi Seas, Alaska (CEQ No. 20070119)**. Our review has been conducted in accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act.

The National Marine Fisheries Service (NMFS) and Minerals Management Service (MMS) have jointly prepared the subject draft PEIS in order to describe and analyze the potential significant impacts on marine mammals, other Arctic marine life, and native subsistence lifestyles by proposed offshore oil and gas seismic surveys off Alaska. This document also addresses a number of mitigation measures that have been identified as alternatives for potentially reducing impacts on identified affected environments, particularly marine mammals and the endangered bowhead whale. This PEIS will be used for issuing: (1) permits for oil and gas exploration in the Arctic Ocean by MMS, and (2) Incidental Harassment Authorizations (IHAs) to the seismic industry by NMFS to take marine mammals incidental to oil and gas seismic surveys in the Arctic Ocean. Since sounds generated by seismic survey operations and related activities have the potential to adversely impact marine mammals and other marine resources, IHAs would be required in order to legally harass marine mammals, incidental to conducting seismic surveys.

The draft PEIS identifies eight action alternatives and the no action alternative. Analyzed alternatives range from issuance of MMS permits with and without mitigation measures. Specifically, the alternatives include different combinations of safety and exclusion zones for preventing injury (180/190 dB), limiting behavioral harassment (160 dB) and limiting impacts on feeding and migrating bowhead cow calf pairs (160 dB/120 dB, respectively). An alternative to protect feeding and migration areas through specific restrictions to further reduce impacts to

various aggregations of bowhead and gray whales has also been analyzed. At this time, MMS and NMFS have not identified a preferred alternative. Alternative 2, which would approve seismic surveys as proposed, with existing Alaska OCS exploration permit stipulations and guidelines, is the proposed action.

EPA appreciates the decision of NMFS/MMS to develop an EIS for this proposed action. We recognize the challenges that NMFS/MMS faced in preparing this draft PEIS, especially with the lack of scientific data and the high levels of uncertainty associated with the impacts of concurrent seismic and high-resolution surveys on marine resources, particularly the endangered bowhead whale. The draft PEIS acknowledges the uncertainties regarding existing environmental conditions, environmental effects of alternatives (including cumulative effects) and mitigation measures to reduce adverse impacts. The paucity of data regarding the distribution, abundance and habitat use of important biological and subsistence resources in the area, such as the bowhead, creates uncertainty regarding conclusions in the draft PEIS. There are additional layers of uncertainty regarding the probabilities of quantities, locations, and types of seismic surveys that may occur because the hypothetical scenario described in the document used numerous assumptions based on limited past activity and industry speculation.

Although the draft PEIS makes a credible attempt to identify data gaps and uncertainties in the alternatives analyses, EPA is concerned that, overall, the depth and breadth of uncertainties presented in the document result in the lack of adequate support for many of the document's alternatives and conclusions. EPA has assigned a rating of **EC-2 (Environmental Concerns-Insufficient Information)** to this draft PEIS. Please find enclosed a copy of the EPA rating system used in conducting our environmental review. This rating and a summary of our comments will be published in the *Federal Register*. EPA's primary concerns regarding the draft PEIS and our corresponding recommendations for the final PEIS are discussed in further detail in the Attachment.

EPA appreciates the opportunity to review and provide comments on the NMFS/MMS draft PEIS for Seismic Surveys in the Beaufort and Chukchi Seas, Alaska. If you have any questions or comments concerning this review, please contact me at (206) 553-1601. Please also feel free to contact Jennifer Curtis in our Alaska Operations Office at (907) 271-6324 or [curtis.jennifer@epa.gov](mailto:curtis.jennifer@epa.gov).

Sincerely,

/s/

Christine B. Reichgott, Manager  
NEPA Review Unit

Enclosure

## **ATTACHMENT**

### **EPA Detailed Comments on NMFS/MMS Draft Programmatic Environmental Impact Statement for Seismic Surveys in the Beaufort and Chukchi Seas, Alaska**

#### **Range of Alternatives**

Currently the draft PEIS analyzes eight action alternatives providing issuance of permits without mitigation (proposed action), as well as seven alternatives with various degrees and types of mitigation. Each action alternative is based on the assumption that up to six seismic surveys could occur within both the Beaufort and Chukchi project areas. This assumption appears to be based solely on interest expressed by industry and activity in the Beaufort and Chukchi in recent years. EPA encourages consideration of additional alternatives that may allow varying numbers (specifically fewer and greater numbers of surveys), particularly with the increased interest in oil and gas exploration in the Outer Continental Shelf (OCS) off northern Alaska and the imprecise nature of industry estimates. Such alternatives were not analyzed in the draft PEIS. At this stage of the NEPA process, there is an opportunity to reevaluate, modify or consider additional reasonable alternatives to avoid, minimize and/or mitigate for potential adverse impacts to resources in the Beaufort and Chukchi.

#### **EPA Recommendations for Selection of a Final Preferred Alternative**

Of the existing alternatives, EPA concurs with NMFS/MMS identification of Alternatives 3 and 8 as the most protective of biological resources and subsistence activities among existing alternatives. We encourage the selection of one of these two alternatives as the Preferred Alternative, particularly if no more protective alternatives are additionally considered. The selection of a more protective alternative is especially critical given the lack of data regarding impacts to marine mammals and other marine species when concurrent surveys are anticipated. EPA's review of the draft PEIS indicates that, even with the selection of Alternative 3 or 8, there would likely be adverse impacts that should be avoided in order to provide protection of the environment and subsistence resources.

#### **Coordination with Other NEPA Activities**

The Draft PEIS for Seismic Surveys in the Beaufort and Chukchi Seas has been developed within the same timeframe as several other NEPA processes being undertaken on the North Slope by NMFS, MMS, and other federal agencies. As we stated in our comment letter to MMS on the Lease Sale 193/Seismic Survey DEIS, EPA is concerned that the overlapping schedules of the different NEPA documents, and the relatively short timelines assigned to developing and finalizing the documents, will make it very difficult for NMFS/MMS to obtain, evaluate and incorporate the most up-to-date information in each document. EPA recommends that NMFS and MMS coordinate and synchronize the schedules of the various NEPA efforts and allow for ample time for public review and input, for their ongoing NEPA efforts in order to provide for public participation and maximize the use and effectiveness of new, updated information and input from agencies, tribes and the public into each document. EPA also recommends that

NMFS/MMS describe how the comments that were received have been considered for each document in the final PEIS, as applicable.

### **Cumulative Impacts**

Also similar to the MMS 193 Lease Sale, EPA is concerned that the Draft EIS does not adequately analyze potential cumulative impacts on Alaska's offshore ecosystem and the local communities who depend on healthy ecosystems for their social, cultural and subsistence way of life. An expanded analysis and discussion regarding potential cumulative effects from past, present and reasonably foreseeable future OCS and non-OCS related activities within the larger project area should be included in the final PEIS. In particular, an expanded discussion of present and reasonably foreseeable future non-OCS activities, which include the expected significant increase in non-energy related minerals exploration and development in northern Alaska, and their potential impacts should be included for the cumulative case in the final PEIS. Mineral exploration and development activities that are currently underway and expected to increase in northwestern Alaska over the next several years are relevant to the cumulative analysis (e.g., expansions to the Red Dog Mine, coal extraction on Arctic Slope Regional Corporation land and hard rock mining activities in South NPR-A). Additional discussion regarding increased marine vessel traffic, including large-volume cargo vessels, and land use alterations that are likely to result from onshore hard rock mining activity and future development of oil and gas resources in the NPR-A should be included in the Final EIS.

### **Fuel Spill Probabilities and Risk**

In the draft PEIS, NMFS/MMS used probability assumptions to determine the likelihood of a fuel spill. EPA is concerned that throughout the document, the reference to a "small" or "low" probability of a fuel spill or release, and the projected quantity per event (5 gallons per refueling activity) causes confusion to the reader, and in general does not accurately reflect the potential for larger fuel spills to occur and cause significant adverse, and potentially irreversible, impacts to environmental and subsistence resources. NMFS/MMS should consider the possibility of complete failure of containment, and potential impacts from that scenario, impacts that could be compounded by the inability to clean up oil spills in broken ice and other hazardous conditions in the Beaufort and Chukchi Seas. EPA recommends that NMFS/MMS incorporate a more comprehensive approach to oil spill risk and the adverse impacts that could result from survey and associated support vessels and activities.

### **Endangered Species Act**

EPA is concerned with data gaps regarding the three species of endangered cetaceans (bowhead whale, fin whale, and humpback whale) that occur within or near the project area. Of particular concern is the lack of data regarding the bowhead whale, given its endangered status and the critical role it plays in the subsistence lifestyle of Alaska Natives in the Arctic. The draft PEIS identifies significant uncertainties about the details of many cumulative effects on the bowhead population in the project area. The final PEIS needs to provide additional information to support conclusions regarding potential adverse impacts to the bowhead whale as a result of seismic and high-resolution surveys, and the effectiveness of mitigation measures to avoid or

minimize adverse impacts. The final PEIS should also provide additional explanation of how input from local residents and affected tribes regarding bowhead whale distribution and behavior (with and without industrial activities in the area) was evaluated and used during the NEPA process and how the input was factored into the selection of a preferred alternative.

Additionally, the U.S. Fish and Wildlife Service is currently considering comments submitted in response to the proposed rule to add the polar bear to the list of threatened and endangered species. A decision regarding listing the polar bear may occur during preparation of the final PEIS. EPA recommends that the final PEIS incorporate the best available current information on the regulatory status of the polar bear, including potential designation of any new critical habitat areas, and the implications for survey activities in the Beaufort and Chukchi Seas.

### **Adaptive Management and Monitoring**

Section IV of the draft PEIS broadly discusses the monitoring measures that will be employed in each of the action alternatives, as well as the evaluation of monitoring efforts attempted during the 2006 Open Water Season. This section does not identify the development of any adaptive management strategies that could be applied should mitigation activities and stipulations not adequately protect and conserve subsistence and other resources. EPA recommends the development and integration of an adaptive management program to protect resources that are not adequately safeguarded under existing mitigation measures and stipulations.

### **Tribal Consultation**

The draft PEIS does not discuss or document the consultation process used by NMFS/MMS to formally consult and/or coordinate with Alaska tribal governments that could be potentially affected by this project on a government-to-government basis. The draft PEIS includes an abbreviated section (V. Consultation and Coordination) that describes the scoping process for the draft PEIS, and participation in the 2006 Open Water Meeting, as well as a distribution list for the documents. EPA recommends that the final PEIS include a separate section that addresses NMFS/MMS's tribal consultation obligations and activities undertaken during preparation of the draft and final PEIS.

Presidential Executive Order (EO) 13175 Consultation and Coordination with Indian Tribal Governments (November 6, 2000; FR Vol. 65; No. 218) recognizes the unique legal relationship the United States has with tribal governments. The EO requires all federal agencies to establish regular and meaningful consultation and collaboration with tribal officials and to strengthen the United States government-to-government relationships with Indian tribes. The scheduled public meetings in the various communities meetings do not fulfill the tribal consultation responsibilities described in E.O. 13175. Formal consultation must take place with the interested tribal governments potentially impacted by this project. The opportunity for effective consultation should be created to allow for meaningful tribal input. In addition to documenting the tribal consultation process that was completed during the preparation of the draft and final PEIS, the final PEIS should include a discussion of how comments that were heard during consultation were considered during the preparation of the draft PEIS and in the selection of the

preferred alternative in the final PEIS. If consultation was offered, but not accepted by the tribal governments, that information should be provided in the documents.

In addition to the whaling communities identified throughout the draft PEIS, the proposed project could affect traditional trade and cultural practices of other communities that utilize and obtain subsistence and other traditional resources through barter and trade with the whaling communities. Tribal governments that may be impacted, either directly and indirectly, by this action should also be invited to consult with NMFS/MMS. For instance, there may be impacts to the trade and bartering activities that occur with bowhead meat, bone, and baleen throughout the year with non-whaling Native communities.

## **Public Participation**

The draft PEIS does not include a summary of comments that were received and evaluated during the public scoping period, the scoping comments or a reference for obtaining and reviewing comments. EPA recommends that information from comment letters and meetings that have occurred more recently be included in this document in order to disclose and discuss continuing issues and concerns or new issues and concerns that have been communicated during the development of this analysis. The final PEIS should include a section that discloses and discusses public comments that were received during the scoping period and responses to comments that were received during the public comment period on the draft FEIS. The section should be organized and formatted such that it is easy for the reader to see the individual comments, the responses to comments, and determine how NMFS/MMS considered individual during the preparation of the final PEIS and the Preferred Alternative.

Additionally, NFMS/MMS should consider interspersing the various tables, maps and figures from Section VIII into the discussion sections of the document in order to assist the public in its review, and to improve readability. The quality of several of the figures should also be refined to ensure clarity for the reader.

## **Environmental Justice**

As also stated in EPA's comments on Lease Sale 193, EPA's primary concerns with the issue of environmental justice during this NEPA process and in discussions in the draft PEIS focus on the effects of multiple, overlapping and fast-tracked planning processes that have occurred over the past several months, and increasing concerns from local residents regarding human health impacts from proposed oil and gas exploration, development and production activities in the area.

EPA recognizes that the enormous amount of information that has been prepared in various NEPA documents for oil and gas activities in the Alaska Arctic over the past several months has put a strain on local communities' abilities to adequately review and respond to proposed activities that directly affect their quality of life and, in particular, their subsistence way of life. In recent months, public input has been solicited for the Beaufort Sea Oil and Gas Lease Sale 202 EA and Finding of No Significant Impact, the MMS OCS 5-Year Program for 2007-2012 and the accompanying 5-Year Program Draft EIS, the NOI for a Programmatic EIS for seismic

activities in the Chukchi and Beaufort Seas, an NOI for a Supplemental EIS for the Northeast National Petroleum Reserve-Alaska (NPR-A) Integrated Activity Plan, and Lease Sale 193 Draft EIS. The public review and comment periods have at times occurred during critical whaling and other subsistence activity seasons when many of the key individuals in the communities were likely unavailable, and they have all occurred in such rapid succession that thoughtful and meaningful reviews, which the agencies ask for and expect, have undoubtedly been constrained. More importantly, it is understandable that the pressure to review, comment on and ultimately live with the rapid pace of industrial activities creates stress and other adverse impacts to individuals living in the area. EPA recommends that the NMFS/MMS consider any requests by local residents to extend review and comment deadline, and to coordinate future deadlines and meetings so that conflicts with subsistence and other traditional activities are minimized, if not avoided.

A second concern relative to environmental justice results from the recurring comments from local residents and North Slope Borough (NSB) officials about recognized and potential human health impacts from onshore and offshore oil and gas activities on the North Slope. It is our understanding that on several occasions, MMS and other federal agencies have been asked by NSB officials to engage in meaningful discussions and consultation about environmental health concerns of local residents. EPA understands the challenges associated with studies of impacts from oil and gas activities on community and individual human health and the evaluation of potential mitigation for impacts. However, EPA continues to encourage NMFS/MMS to foster and participate in focused dialogue with local residents in order to better understand the types of concerns regarding human health that are in the communities and work with communities to explore potential ways to analyze and mitigate adverse impacts. EPA considers the analysis of human health impacts from proposed oil and gas activities part of the NEPA process, and we would be interested in assisting MMS in their efforts.